



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,143	06/27/2001	Antti Kansakoski	871.0014.USU	4012
29683	7590	07/21/2005	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			NGUYEN, DUNG X	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,143

Applicant(s)

KANSAKOSKI ET AL.

Examiner

Dung X. Nguyen

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 9, 16, 19, 21, 24, 26 and 30 is/are rejected.
- 7) ☒ Claim(s) 2 - 8, 10 - 15, 17, 18, 20, 22 - 25, 27 - 29, and 31 - 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Response to Arguments

1. Applicant's arguments filed on February 24, 2005 have been fully considered and are persuasive. Therefore, the rejection(s) of the Office action filed on November 23, 2004 has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of new found reference(s). Claims 26 – 33 have been added.

Claim Objections

2. **Claim 1 is objected** to because of the following informalities: "an RF section" as recited line 2 should be changed to "a RF section". Appropriate correction is required.

3. **Claim 15 is objected** to because of the following informalities: "the maximum value" as recited line 7 should be changed to "a maximum value". Appropriate correction is required.

4. **Claim 16 is objected** to because of the following informalities: "a searcher" as recited line 6 should be changed to "the searcher" and "a searcher" as recited line 7, second appearance should be changed to "the searcher". Appropriate correction is required.

5. **Claim 21 is objected** to because of the following informalities: "a searcher" as recited line 7, second appearance should be changed to "the searcher". Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1, 9, 16, 19, 21, 24, 26, and 30 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Ohsuge (US 6,795,422 B2), and further in view of Challa et al. (US patent # 6,700,922 B2).

Regarding claim 1, Ohsuge discloses (figure 3) that a CDMA receiver, comprising:

- A RF section (2, 3) for receiving a CDMA signal;
- A circuit for determining an instantaneous total received power (I_o) of the received CDMA signal (8, 1) (column 1, lines 50- 58, column 4, lines 4 – 13, and column 15, lines 7 - 20).

Ohsuge differs from the instant claimed invention that it does not show the steps of a searcher that is one of enabled for operation or disabled from operation in accordance with the value of I_o .

However, Challa et al. discloses (figure 5) a searcher (128) that is one of enabled for operation or disabled from operation in accordance with the value of power (column 8, line 27 - 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Ohsuge and Challa et al. to provide the requirements of the instant claimed invention for searching the signal based on the operational conditions (column 3, lines 23 – 27 of Challa et al.).

Regarding claim 9, the limitations are analyzed in the same manner set forth as claim 1.

Regarding claim 16, Ohsuge discloses (figure 3) that a CDMA receiver, comprising:

- A RF section (2, 3) for receiving a CDMA signal and storing samples of the received CDMA signal into a control memory (16) while determining an instantaneous total

received power (I_o) of the received CDMA signal (8, 1, column 1, lines 50- 58, and column 4, lines 4 - 13).

Ohsuge differs from the instant claimed invention that it does not show the steps of a selectively one of generating or not generating a searcher trigger signal in accordance with the value of the instantaneous total received power, wherein when generated the searcher trigger signal causes a searcher to process the stored samples.

However, Challa et al. discloses a selectively one of generating or not generating a searcher trigger signal in accordance with the value of the received power (column 8, lines 27 - 36), wherein when generated the searcher trigger signal causes a searcher to process the stored samples (column 5, lines 26 - 31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Ohsuge and Challa et al. to provide the requirements of the instant claimed invention for searching the signal based on the operational conditions (column 3, lines 23 - 27 of Challa et al.).

Regarding claim 19, as followed by the limitations analyzed in claim 16, Ohsuge and Challa et al. differ from the instant claimed invention that they do not show the steps of wherein the searcher buffer stores In-phase and quadrature-phase samples (I/Q). However, the searcher (pilot signal) inherently has the in-phase and quadrature-phase samples (I/Q).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to recognize Ohsuge and Challa et al. to provide the requirements of the instant claimed invention for searching the signal based on the operational conditions (column 3, lines 23 - 27 of Challa et al.).

Regarding claim 21, the limitations are analyzed in the same manner set forth as claim 16.

Regarding claim 24, as followed by the limitations analyzed in claim 21, the limitations are analyzed in the same manner set forth as claim 16.

Art Unit: 2631

Regarding claim 26, the limitations are analyzed in the same manner set forth as claim 1.

Regarding claim 30, the limitations are analyzed in the same manner set forth as claim 1.

Allowable Subject Matter

8. **Claims 2 – 8, 10 – 14, 17, 18, 20, 22, 23, 25, 27 – 29, and 31 - 33 are objected** to as being dependent upon a rejected or objected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. **Claims 15 would be allowable** if rewritten or amended to overcome the objection(s), set forth in this Office action.

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (571) 272-3010. The examiner can normally be reached on Monday through Friday from 8:00 AM to 17:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Vanderpuye, Kenneth N. can be reached on (571) 272-3078. The fax phone numbers for this group is (571) 273-3021.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

DXN

July 09, 2005


**KENNETH VANDERPUYE
PRIMARY EXAMINER**